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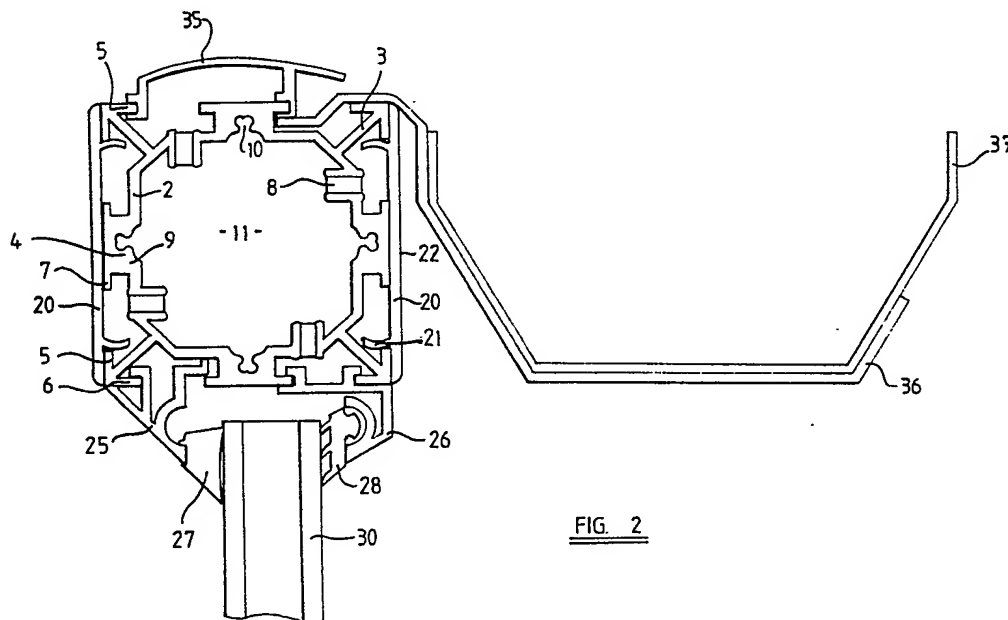
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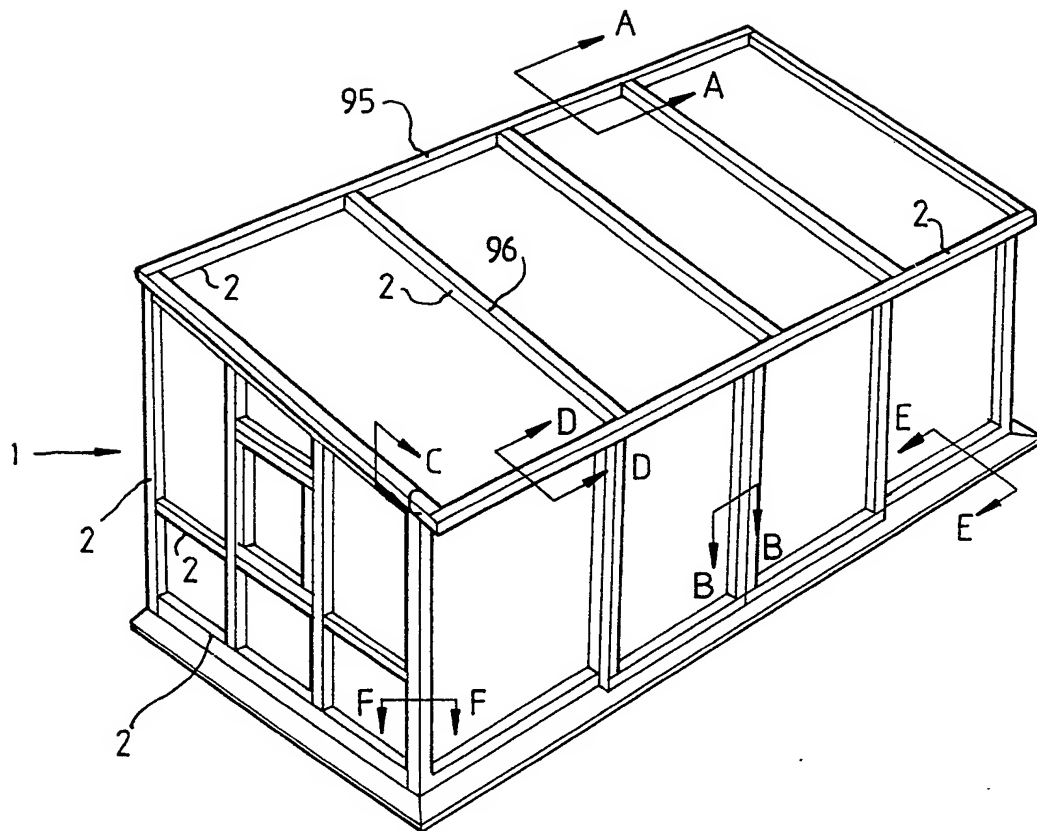
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(58) Field of search
UK CL (Edition K) E1D DCB DGS DK DLEKMN

(54) **Framing member for e.g. conservatories**

(57) An elongate framing member for construction of a building such as a conservatory has a plurality of first formations (3) and second formations (4) which are adapted to interfit with formations provided on other sub-units of the construction, the first and second formations (3, 4) being substantially symmetrically distributed about the framing member's axis. Panels 30, glazing beads 27, 28, cover plates 20 and gutters 37 may be clipped to the framing member. The framing member may be joined side by side with a like member for a roof ridge, may form an eaves unit or form part of a sliding door.



FIG. 1

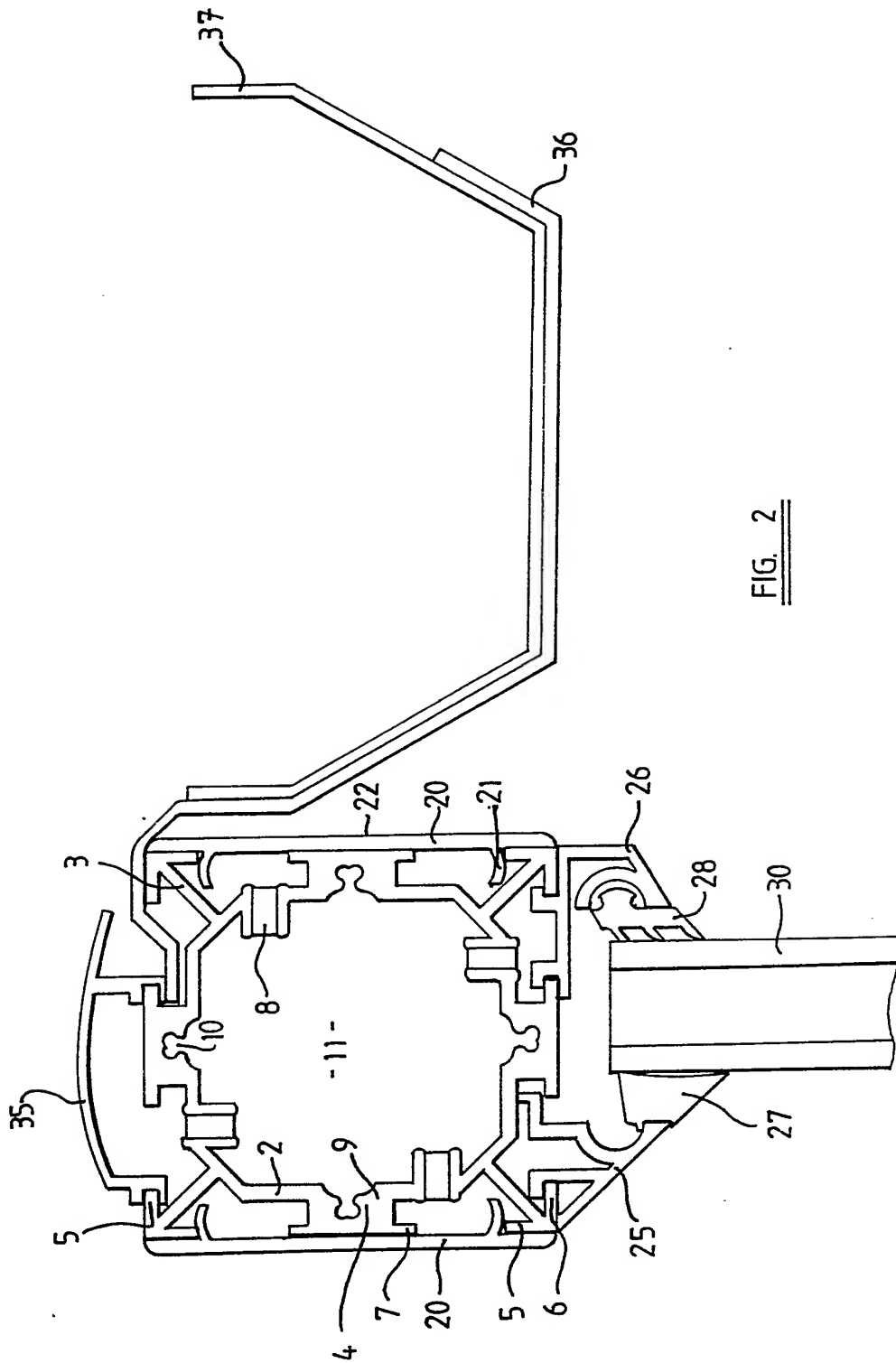


FIG. 2

FIG. 3

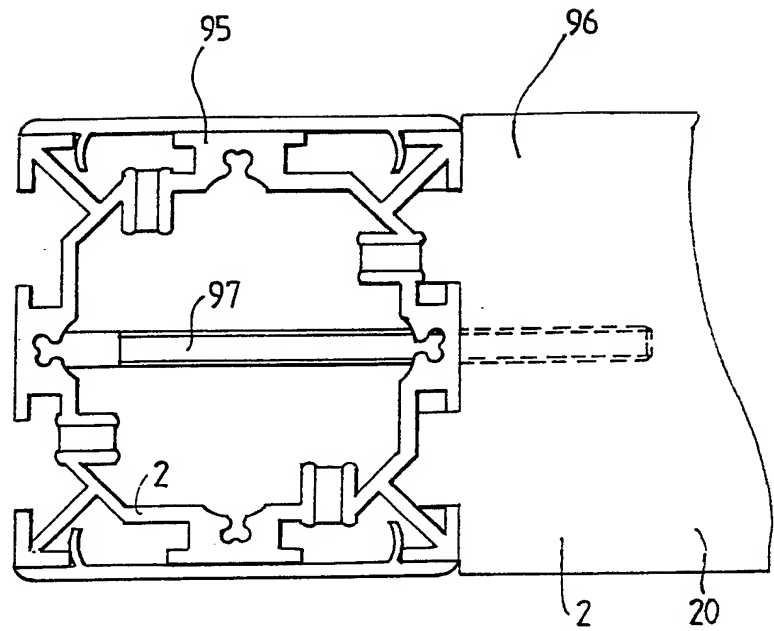
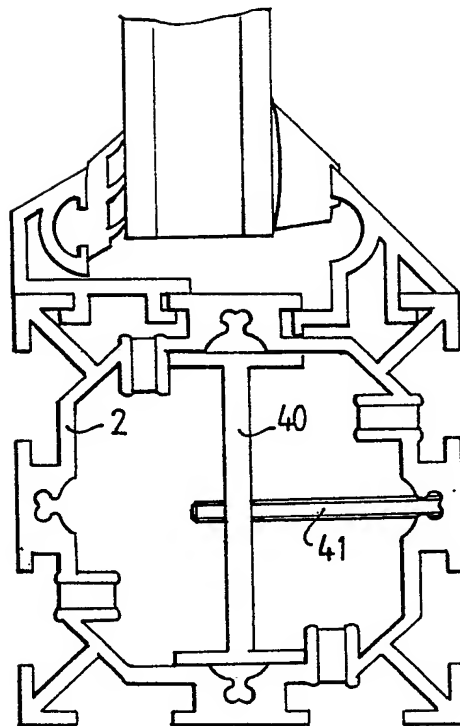


FIG. 4



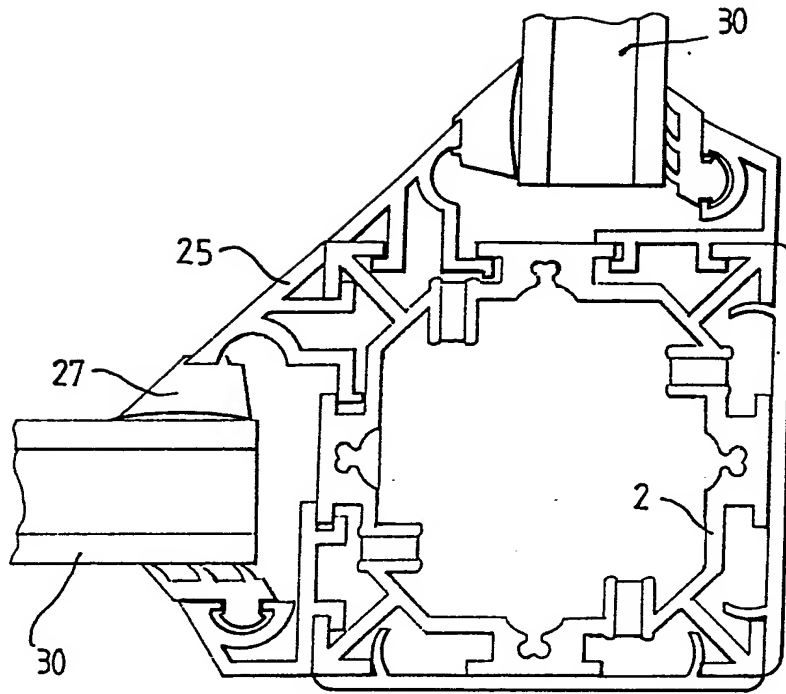


FIG. 5

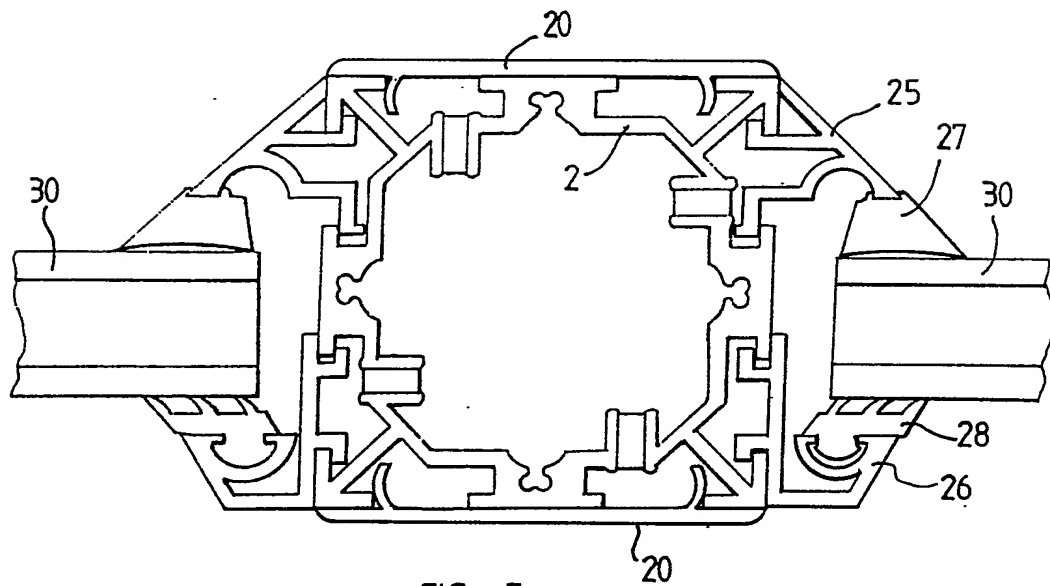
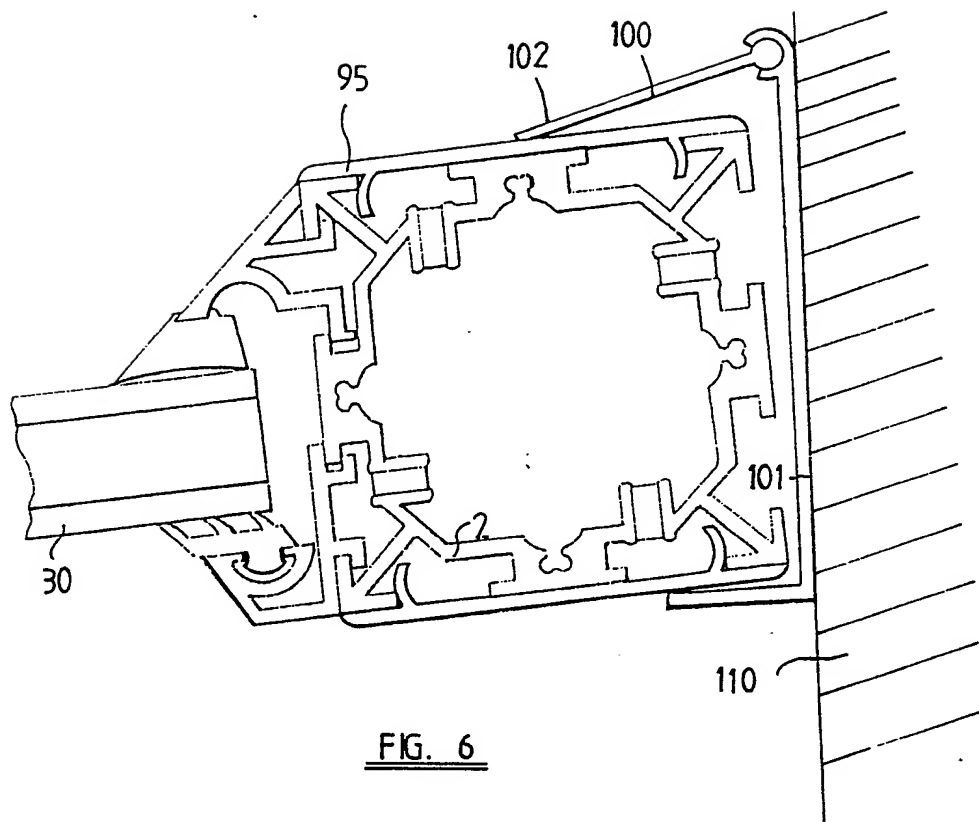


FIG. 7



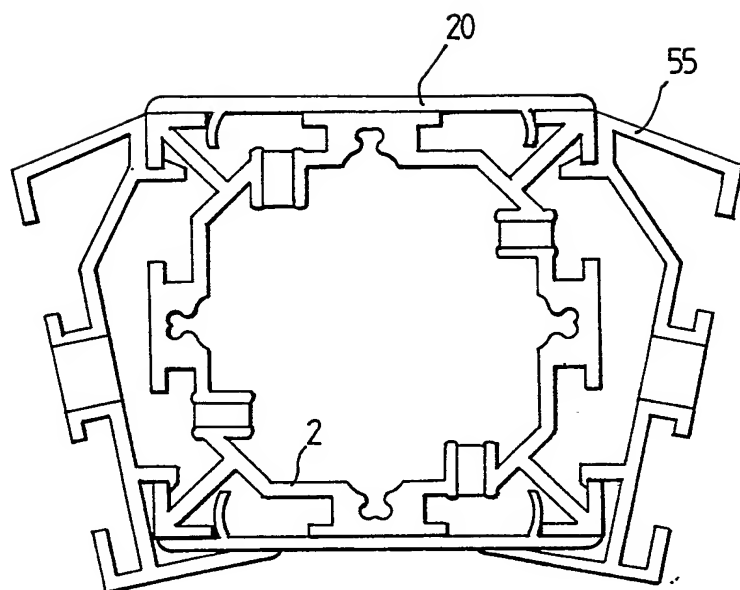
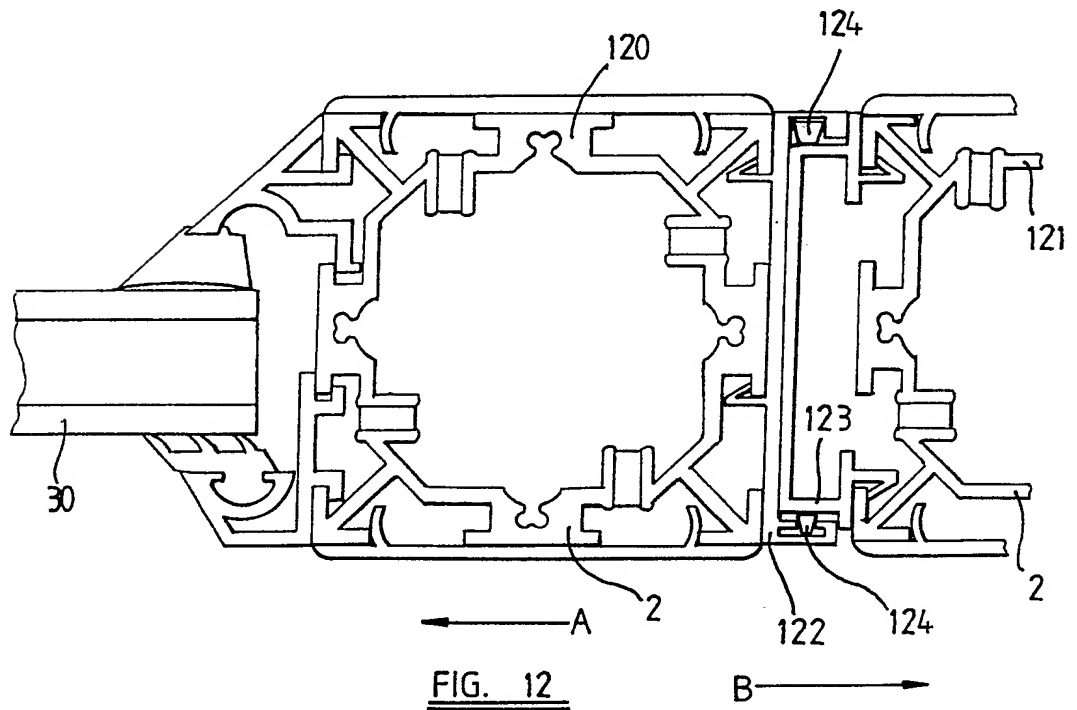
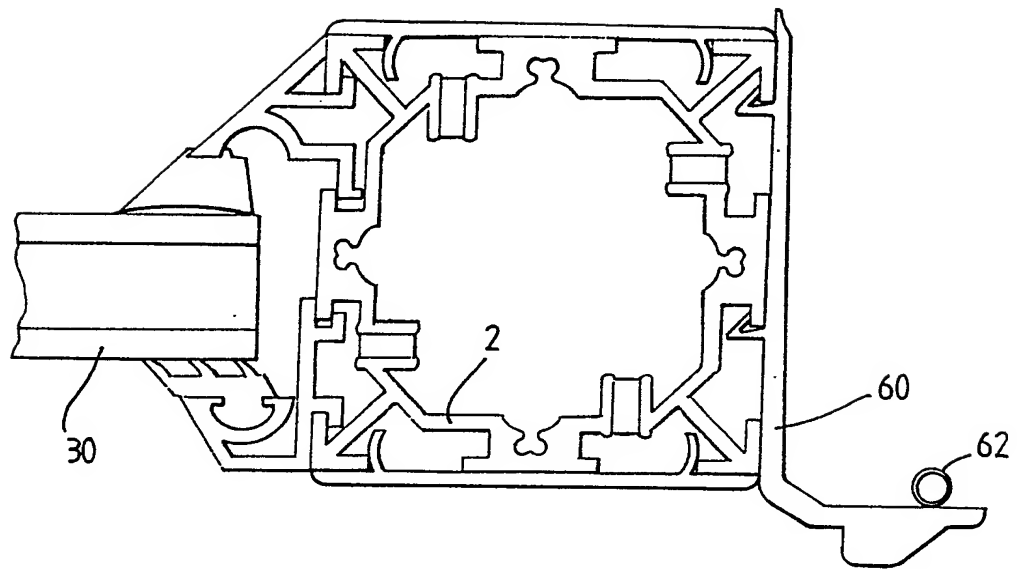


FIG. 8



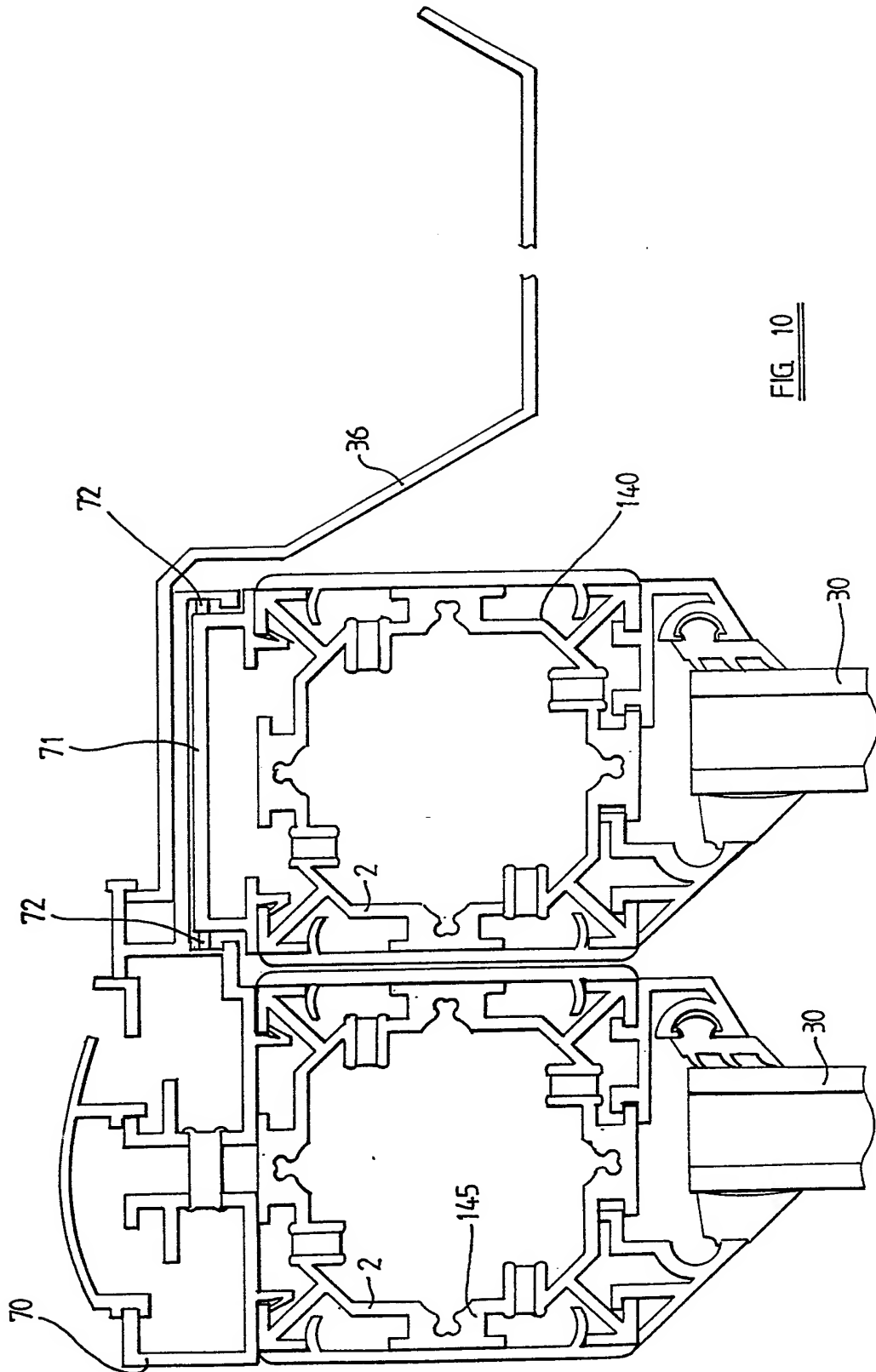
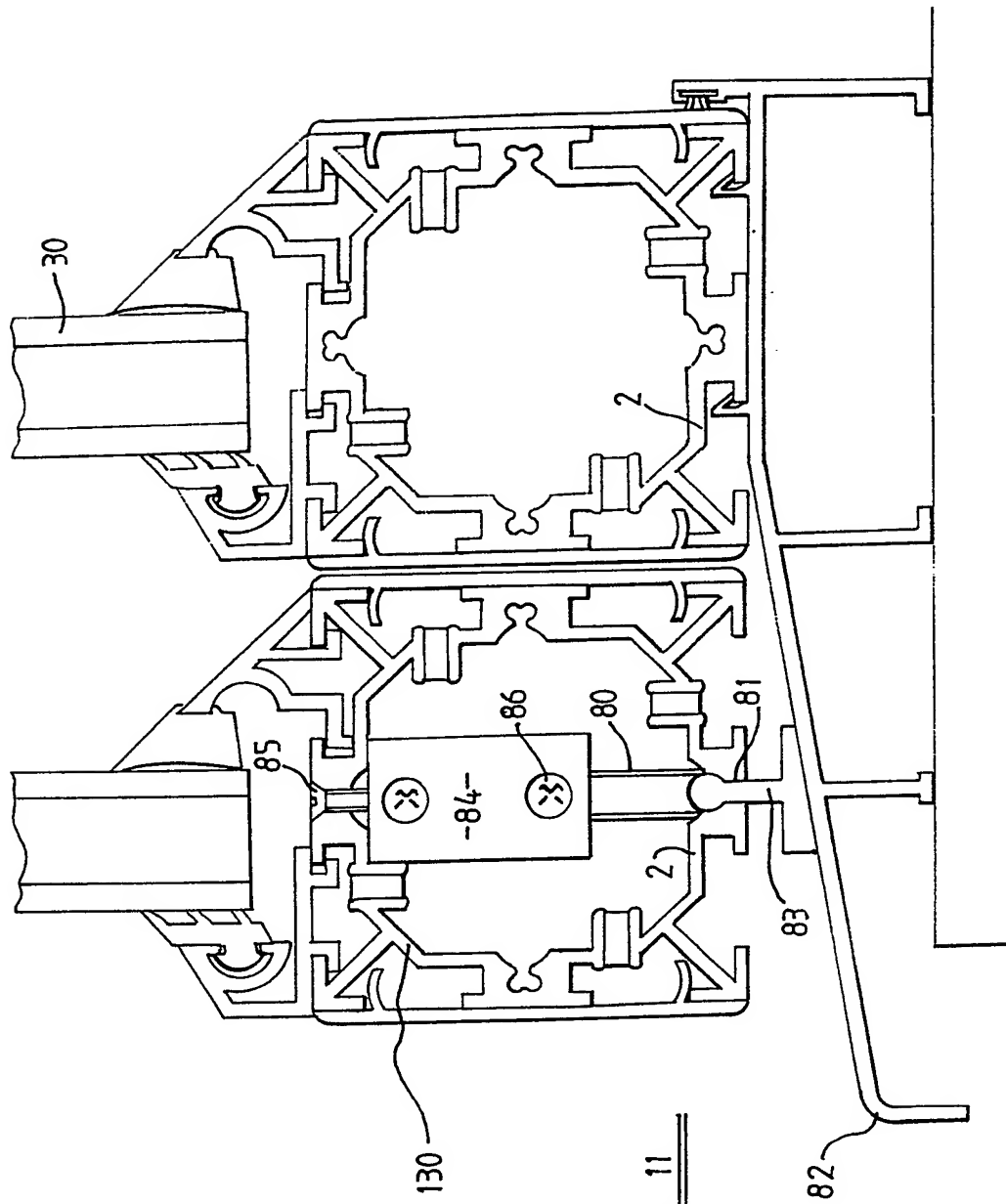
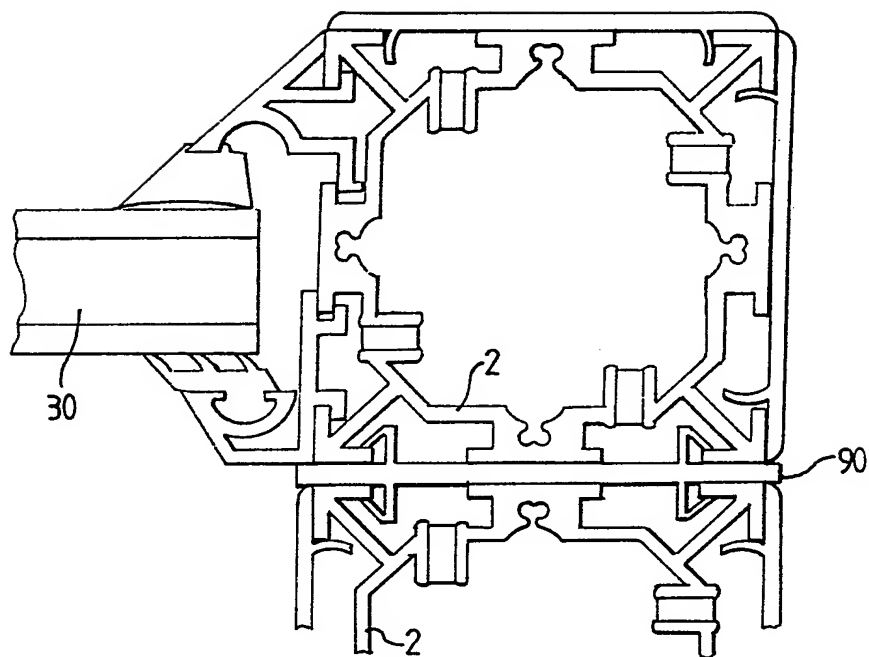
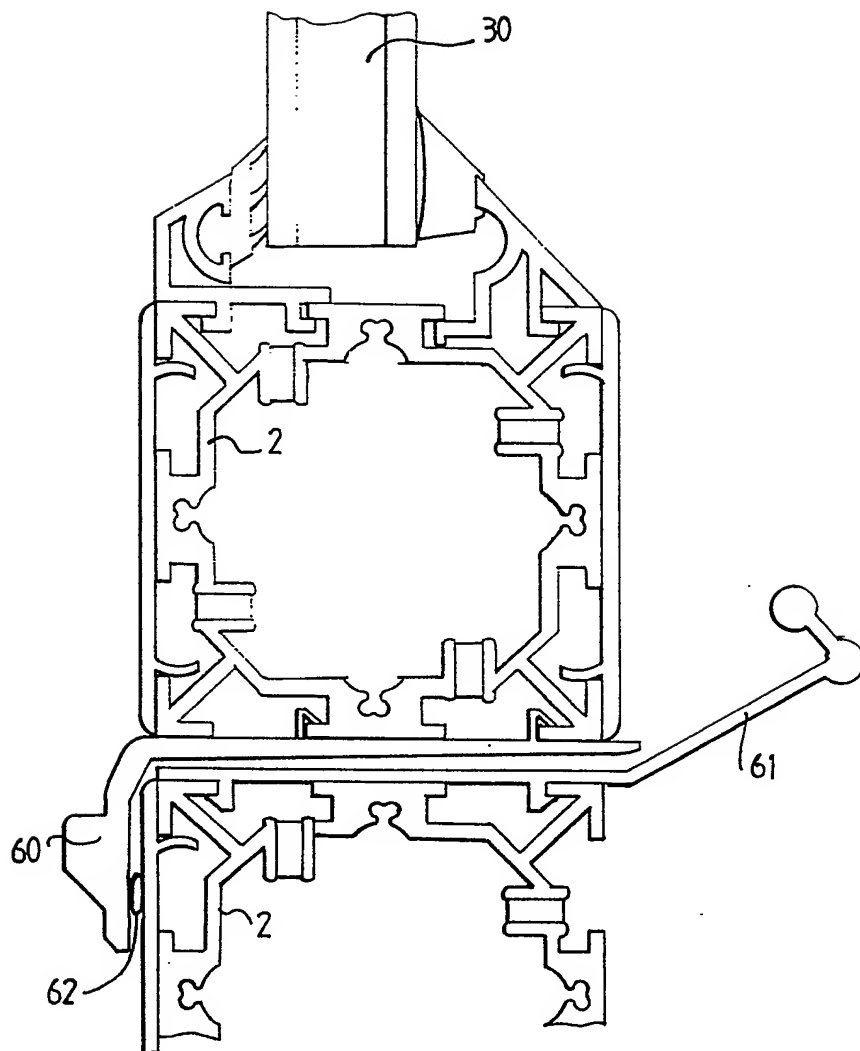


FIG. 10



FIG. 13

FIG. 14

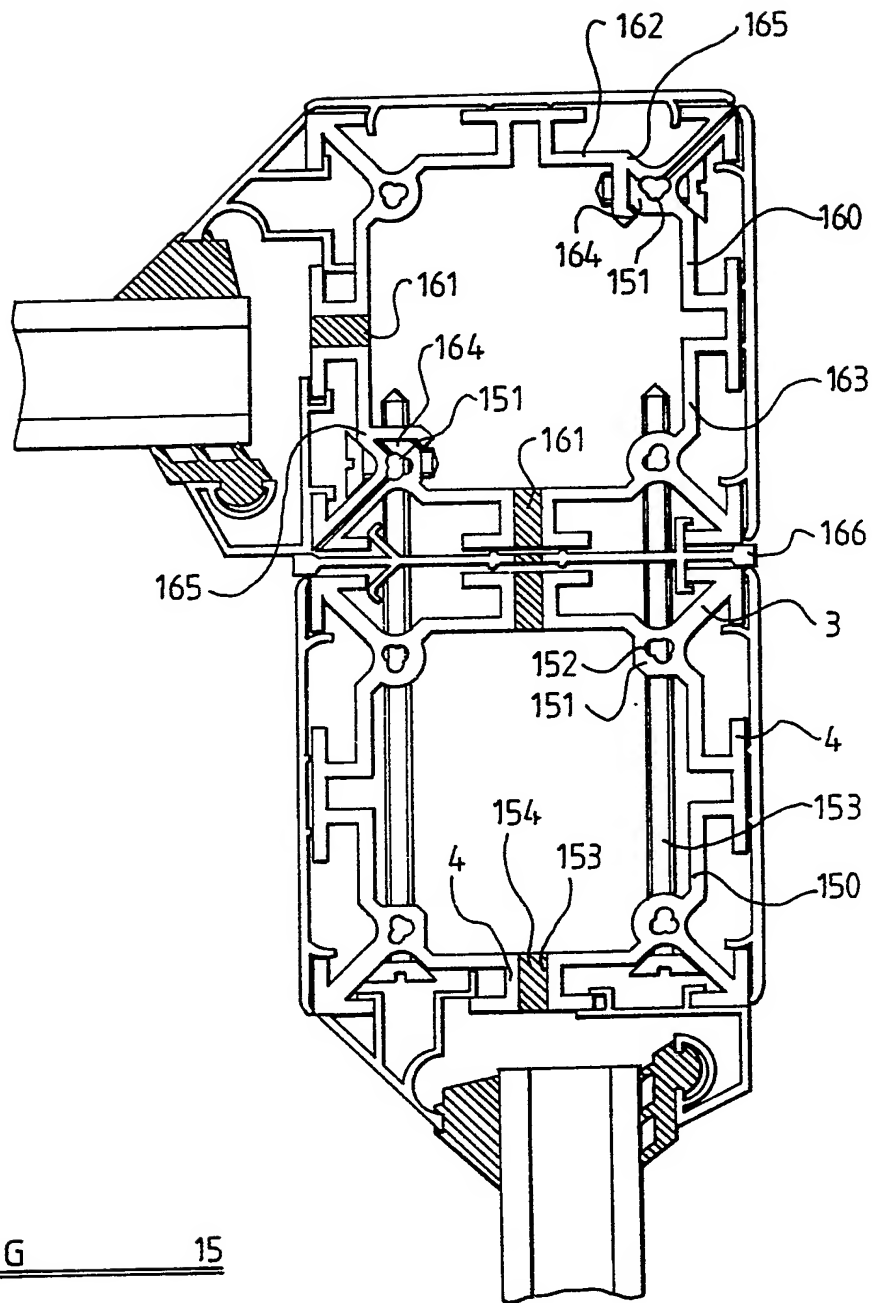


FIG 16

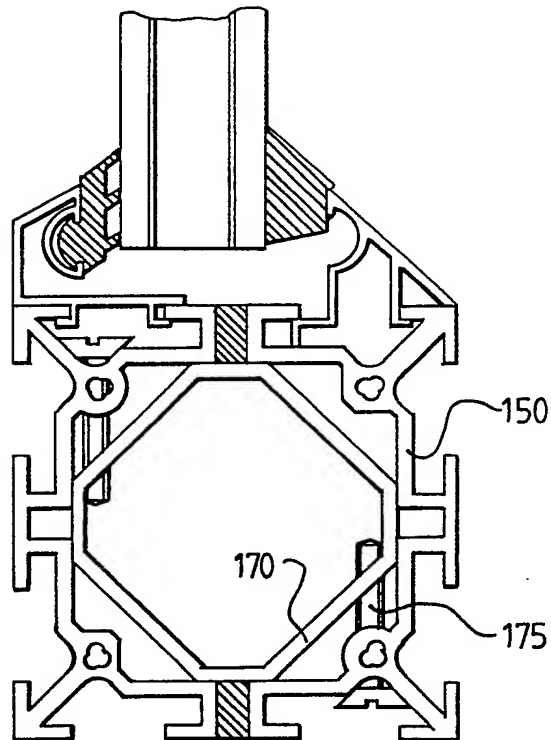
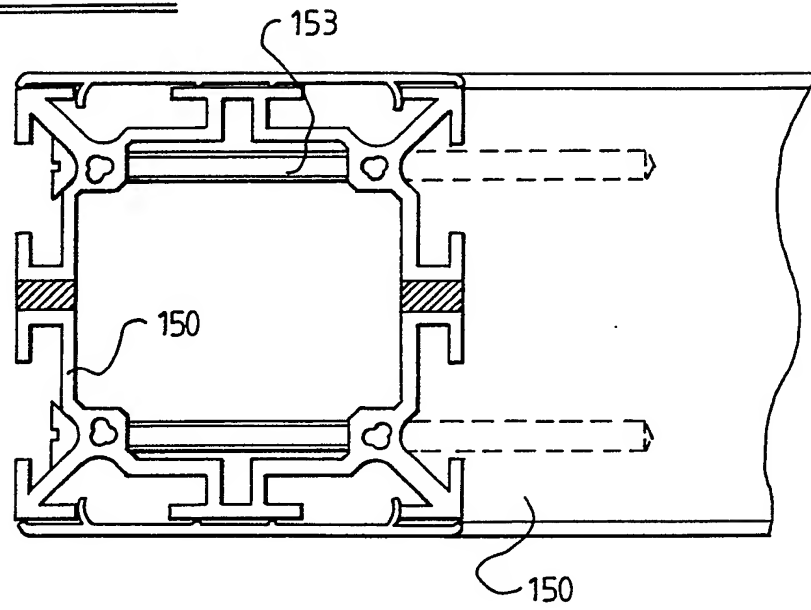


FIG 17

PATENTS ACT 1977
CAS/MR/PL/A 5900 GB

Title: Sub Unit for a Construction

Description of Invention

This invention relates to a sub-unit for a construction.

In particular, the sub-unit is useful for the construction of buildings such as conservatories and the like but may also be used for and in any kind of construction which comprises a framework of interconnected sub-units.

According to a first aspect of the invention we provide a first sub-unit for a construction, which construction comprises a plurality of dissimilar kinds of sub-units attached together, the sub-unit comprising an elongate member which affords a plurality of first formations on a longitudinally extending surface thereof, the first formations being adapted to interfit with one or more further formations provided on one or more of the other sub-units, wherein the first formations are distributed substantially symmetrically about a longitudinal axis of the first sub-unit.

Preferably, there are four first formations each projecting away from the others and from the longitudinal axis of the first sub-unit in two mutually perpendicular planes which bisect one another at the longitudinal axis.

The first sub-unit may afford a plurality of second formations on its longitudinally extending surface, the second formations being dissimilar to the first formations and being adapted to interfit with one or more still further formations which are provided on said one or more of said one or more of the other sub-units.

The second formations may be distributed symmetrically about a longitudinal axis of the first sub-unit.

Preferably, there are four second formations each of which extends away from a plane containing the longitudinal axes of one of the other second formations at 180° thereto and which extends away from a plane containing the longitudinal axes of the remaining two second formations at 90° thereto.

Both the first and second formations may be distributed symmetrically about a plane which comprises a plane of symmetry of any one of the first formations or any one of the second formations.

The first and second formations may both afford parts which extend towards each other and preferably the parts, in transverse section, each define a portion of the periphery of a square, the parts being at the extremities of the formations.

Preferably, each first formation is arrow shaped in transverse cross-section, half of a head of the arrow extending towards one of the second formations and the other half of the head extending towards a further second formation.

Preferably, each second formation is generally T-shaped in transverse section, a top of the T extending towards and substantially parallel with half of a head of a first formation on one side thereof and towards half of a head of another first formation on the other side thereof.

Preferably, between each pair of first formations, a second formation extends.

Preferably, both the first and second formations extend throughout the entire length of the first sub-unit.

The first sub-unit may be tubular and is preferably of a regular transverse cross-sectional shape, and in an especially preferred embodiment the tube is octagonal in transverse cross-section, the first formations being provided on every second face thereof and the second formations being provided on every alternate face thereof, each face bearing a first formation only or a second formation only.

The first sub-unit may comprise an extruded material and it may have thermal breaking members included therein which extend longitudinally thereof.

The thermal breaking members may be located within, and form part of, two of the second formations.

The first sub-unit may comprise two channel members secured together with the channels of each channel member facing towards each other and defining an internal hollow of the first sub-unit.

One of the channel members may afford a male formation and the other channel member may afford a female formation with which the male formation may be interfitted.

Preferably, the male formation extends longitudinally of its respective channel member at or near a longitudinally extending rim of the channel and another male formation is provided at or near another longitudinally extending rim of the channel and extends longitudinally thereof, and the female formation extends longitudinally of its respective channel member at or near a longitudinally extending rim of the channel and another female formation is provided at or near another longitudinally extending rim of the channel and extends longitudinally thereof.

The two channel members may be adapted to be secured together such that the thermal breaking members included in each are provided in oppositely facing sides of the first sub-unit when the two channel members are secured together, or such that the thermal braking members included in each channel member lie in sides of the first sub-unit which extend substantially perpendicular to one another.

The first sub-unit may include portions which are adapted to receive fixing elements such as screws therethrough and preferably the portions comprise at least one of a longitudinally extending hole or a longitudinally extending recess.

According to a second aspect of the invention, we provide a kit of sub-units suitable for attachment together to form a construction, the sub-units including a first sub-unit according to the first aspect of the invention.

Each sub-unit may include a part by which it may be interfitted with another sub-unit to permit of attaching the sub-units together.

The attachment between the sub-units may be releasable by moving the sub-units in specific directions relative to one another.

On some of the sub-units, the parts may comprise formations which are adapted to fit with other parts.

Preferably, the formations on at least some of the sub-units are resiliently deformable.

The sub-units include a glazing panel, beading, guttering, a sill and a door.

Specific embodiments of the invention will now be described by way of example only and with reference to the accompanying drawings, in which:-

FIGURE 1 is a perspective view of a construction comprising a first sub-unit according to the invention;

FIGURE 2 is a section through part of a construction similar to the one shown in Figure 1 but not affording double sliding doors, or a section through part of a construction in which an upstanding side or part of an upstanding side thereof affords no support for double sliding doors, the Figure showing a first sub-unit according to the invention having other sub-units including a glazing panel and guttering attached thereto;

FIGURE 3 is a section through a further part of the construction shown in Figure 1 at a T-joint thereof, the section being taken on the line A-A;

FIGURE 4 is a section through a first sub-unit according to the invention shown with a reinforcing sub-unit in attachment thereto;

FIGURE 5 is a section on the line F-F of Figure 1 showing a corner of the construction;

FIGURE 6 is a section through a ridge in a roof of a construction such as is shown in Figure 1 in which the ridge has connection with an upstanding surface such as a wall of a building;

FIGURE 7 is a section through a first sub-unit according to the invention shown in connection with two glazing panels extending in substantially the same plane as one another;

FIGURE 8 is a section similar to that shown in Figure 5 but in Figure 8 the sub-units to which the first sub-unit are connected extend in directions which are neither mutually perpendicular nor which extend in the same plane;

FIGURE 9 is a section through a first sub-unit according to the invention in connection with a glazing panel and with a further sub-unit which acts as a support for an openable window or a hinged door;

FIGURE 10 is a section on the line D-D of Figure 1 showing a part of the construction which provides support for double sliding doors;

FIGURE 11 is a section on the line E-E shown in Figure 1 showing a sill and a runner suitable for supporting double doors;

FIGURE 12 is a section on the line B-B of Figure 1 showing part of the double doors;

FIGURE 13 is a section taken on the line C-C of Figure 1 showing part of the slope of a gable end of the construction;

FIGURE 14 is a section through part of the construction similar to the one shown in Figure 1, which part comprises a corner of the construction which is adapted to engage with a sliding door.

FIGURES 15, 16 AND 17 are views analogous to the views taken in Figures 13, 3 and 4 respectively showing a first sub-unit of alternative shape to the first sub-unit shown in Figures 1 to 14.

Referring to the drawings, a construction 1 comprises first sub-units 2 each of which comprises an elongate member which affords first formations 3 and second formations 4 on a longitudinally extending surface thereof.

Both kinds of formations 3 and 4 are adapted to interfit with formations provided on other sub-units, which other sub-units are described hereinafter. Moreover, both kinds of formations 3, 4 extend throughout the entire length of the first sub-unit 2.

Each first sub-unit 2 is a tube of generally octagonal shape in transverse section, alternate faces thereof affording only a first formation 3 or a second formation 4.

If desired, a first sub-unit having a shape other than octagonal, for example circular or generally square, could be provided and could still afford the same or similar kinds of formation as the first and second formations 3, 4 at substantially similar relative positions on an outer face of such a first sub-unit. Moreover, the first and second formations 3, 4 could, if desired, extend over only a part or parts of the first sub-unit.

The first formations 3 are generally arrow shaped, one half 5 of a head of the arrow projecting towards a second formation 4 and a second half 6 thereof projecting towards a further second formation.

The second formations 4 are each generally T-shaped, a top part 7 of the T in each case extending towards and substantially parallel with one half 6 of a head of a first formation 3 on one side thereof and a half 5 of the head of a further first formation 3 on the other side thereof.

The first sub-unit 2 includes thermal breaking members 8 which extend longitudinally thereof and which serve to impair conduction of heat through the first sub-unit 2.

The first sub-unit 2 comprises an extruded material, preferably aluminium but may be provided in rigid plastics if desired. A bottom part 9 of each second formation 4 is broad and affords an aperture 10 extending part of the way therethrough, the aperture 10 communicating with a hollow interior 11 of the first sub-unit.

When it is desired to secure certain kinds of further sub-units to the first sub-unit 2, especially certain kinds of sub-units which reside within the hollow interior 11 of the first sub-unit, screws or bolts may be driven through the top part 7 of one or more of the second formations into the aperture or apertures 10 and can then extend into the hollow interior 11 to secure the appropriate further sub-unit in position.

By provision of a first sub-unit of a construction upon which and to which all of the other sub-units may, directly or indirectly, be connected, a conveniently assembled kit of parts is provided for assembly together to form a construction such as a building, the parts providing a strong construction which is also readily demountable.

Referring specifically to Figure 2, the first sub-unit 2 is shown in connection with facing sub-units 20, each of which affords formations 21 which engage with the first formations 3 on the first sub-unit 2 and which affords a planar or substantially planar face 22 which is supported by the top part 7 of a second formation 4.

A portion of the first sub-unit 2 which faces generally downwardly is shown in connection with glazing support sub-units 25, 26 each of which affords a formation which engages with a first formation 3, the glazing support formations 25, 26 themselves affording portions which support strips of beading 27, 28 and the strips of beading support a glazing panel 30.

If desired, panels of material other than glass may be supported by the first sub-units 2.

A portion of the first sub-unit 2 which faces generally upwardly affords a further facing sub-unit 35, which further sub-unit 35 assists in locating and supporting a gutter support sub-unit 36. The gutter support sub-unit 36 is contoured for supporting a length of guttering 37.

The further facing sub-unit 35 also affords an accurate portion which assists in supporting a roof of the construction which rests thereon and may,

if desired, be fixed relative thereto by suitable means. The roof is, in any case, fixed at the gable end to the upstanding sides of the construction as described in connection with Figure 13.

In Figure 3 the junction is shown between two first sub-units 2 which meet at 90° to one another. Such an arrangement occurs at the junction of first sub-units affording a ridge bar 95 and a roof brace 96 as shown in Figure 1. The longitudinal end of one of the first sub-units 2 is milled so as to cooperate with longitudinally extending formations on the other of the first sub-units. For example, the longitudinal end of the roof brace 96 is milled so as to interfit with the longitudinally extending formations on the ridge bar 95.

The first two sub-units are mutually secured by means of a screw 97 which extends through the hollow interior 11 of the ridge bar and into the hollow interior of the roof brace 96 in which it locates with any suitable means extending into the interior thereof and being supported by the sub-unit 2 thus to hold the sub-units securely.

It will be understood that, if desired, the longitudinal end of the brace 96 need not be milled so as to interfit with longitudinally extending formations on the ridge bar 95, instead the longitudinal end of the roof brace 96 may be perpendicular to a longitudinally extending edge thereof and the two first sub-units 2 may be secured together extending perpendicular to one another by means of the screw 97 connecting parts thereof together.

Referring now to Figure 4, which shows a horizontally extending first sub-unit 2 at a position adjacent which a cruciform joint is formed by the junction of two first sub-units. The first sub-unit 2 is provided with a reinforcement 40 which extends between oppositely facing internal faces of the first sub-unit 2 to give increased support thereto. The reinforcement 40 extends throughout the entire length of the horizontally extending first sub-unit and it is supported and located by screws 41 extending therethrough and attaching the reinforcement 40 to a second formation 4 through which the screws 41 also extend.

The reinforcement 40 extends transversely through the upwardly extending sub-units 2 which is routed out to receive the reinforcement therethrough.

In Figure 5 a first sub-unit 2 is shown which provides a corner for a construction, the sub-unit 2 being connected to and supporting glazing panels 30 which extend perpendicular to one another. To facilitate support of the glazing panels 30 in this way, glazing support sub-units 25 are provided which afford formations by which they engage with the first sub-unit 2 and they afford formations which support beading 27 which supports the glazing panels 30.

Referring to Figure 6, a first sub-unit 2 which comprises a ridge bar 95 has, in connection therewith, a cover plate 100 by which the ridge bar 95 may be connected to a wall 110 or some such similar upstanding surface, in a manner to provide a sealing engagement between the wall 110 and the ridge bar 95.

The cover plate 100 is in the form of an angle section piece of metal 101 which affords, at an end thereof which is distant from the angle therein, a further strip of metal 102 which is connected to the angle section piece of metal in a manner such that its angle relative to the angle section piece of metal can be varied. For example, the angle section piece of metal 101 and the further strip of metal 102 may comprise parts of a hinge.

By providing a cover plate 100 in the form of a hinge, it is possible to engage the ridge bar 95 with an upstanding surface such as the wall 110 irrespective of the angle at which the plane of the roof of the construction extends relative to the wall 110.

In use, the angle section part 101 of the cover plate 100 can be fixed to the wall by suitable means at a position at which the ridge bar 95 lies adjacent the wall 110, the ridge bar can then be positioned against the angle section piece of metal 101 and the further strip of metal 102 can be brought into contact with the ridge bar 95 and sealed against it by any suitable means.

In a similar way, the ridge bar 95 may be connected with a further part of the conservatory, such as a further part of the roof which extends at an angle other than the angle of pitch of the roof of which the ridge bar 95 is a part.

Referring now to Figure 8, a first sub-unit 2 is shown to which angling sub-units 55 are connected by suitable formations which engage with the first formations 3 on the first sub-unit 2.

The shape of the angling formations 55 is such that they permit of attaching further sub-units to the first sub-unit 2 such that the further sub-units extend away from one another at an angle other than 90° or 180° . The angling sub-units are therefore useful, for example when it is desired to assemble together a building which is of a shape other than rectangular in plan view.

In Figure 9 a stop sub-unit 60 is shown in connection with a first sub-unit 2, which stop sub-unit 60 affords an abutment for a further sub-unit of the construction, in this case a sub-unit comprising part of a window frame. Another example of the use of the stop sub-unit 60 is shown in Figure 14 in which the first sub-unit 2 to which the stop sub-unit 60 is attached affords an upright corner post of a building. A further sub-unit 2 which comprises the post of a door and is provided with a handle 61. The door may be moved between opened and closed conditions, the closed condition being shown in Figure 14 in which the first sub-unit 2 which comprises the door post is shown abutting a sealing member 62 provided on the stop sub-unit 60.

In Figure 10, a section through a header for sliding doors, linking sub-units 70, 71, are provided to permit of connecting together two first sub-units 2, one of which 140 comprises the upper part of a frame for a sliding door and is slidable in a direction parallel with its longitudinal axis relative to the adjacent sub-unit 145 which comprises part of the frame or an upstanding wall of the construction. The outermost first sub-unit 140 supports a gutter support sub-unit 36.

The linking sub-unit 71 is slidable within the linking sub-unit 70 and brushes 72 are provided to exclude draught therebetween.

The linking sub-unit 70 affords parts which interfit with and support a further facing sub-unit 35 and a weather seal (not shown).

In Figure 11 which is a section through a sill and runner at the bottom of a double door arrangement the outermost first sub-unit 130 of the two first sub-units shown comprises a base of a sliding door and affords wheels, one of which is shown at 80, internally thereof, which wheels extend towards a hole 81 in a formation of the second kind which faces downwardly towards a sill 82. The wheels 80 engage a runner 83 which is supported on the sill 82 in such a manner that the wheels 80 may be moved longitudinally of the

runner 83 so that the door which affords the wheels 80 may be moved in a direction longitudinally of the runner 83 to open or close the door.

The wheels 80 are supported within the interior of the first sub-unit 130 by means of a support block 84 which is secured to the first sub-unit 2 by means of screws 85, 86.

Referring now to Figure 12, the first sub-units 2 comprise upstanding door posts 120, 121 of double doors, which door posts 120, 121 lie adjacent to one another when the double doors are closed. Faces of the door posts which face towards each other afford respect junction sub-units 122, 123 which are adapted to interfit with one another when the door posts are brought adjacent to one another, suitable weather seals 124 being provided between the junction sub-units 122, 123 for sealing engagement therebetween.

As can be seen in Figure 10, the junction sub-unit 123 may also be used as a linking sub-unit 71.

The double doors may be opened by moving them in the directions shown by the arrows A and B.

In Figure 13, a glazing panel 30 of the roof of the construction is attached to a first sub-unit 2 which comprises part of the frame of a roof and this first sub-unit 2 is attached, by a connecting sub-unit 90, to a further first sub-unit 2 directly below it. The further first sub-unit comprises part of an upstanding frame of the construction.

In Figure 15 which is a section on a similar line to the section taken in Figure 13 showing part of the slope of a gable end of the construction, a second embodiment of the first sub-unit according to the invention is shown.

This alternative first sub-unit 150 includes first formations 3 and second formations 4 which are disposed on an outwardly facing surface of the first sub-unit 150 in an analogous fashion to the first formations 3 and second formations 4 on the first sub-unit 2 described earlier.

The first formations 3 are slightly different in this second embodiment insofar as at the parts of the first formations which are nearest the centre of the first sub-unit 150, a thickened region 151 is provided through which extends a hole 152.

The thickened region 151 and hole 152 extend throughout the length of the first sub-unit 150 in like manner to the first formations 3. The structure

of the first sub-unit in these regions is such that it can readily be punctured by a member such as a nail or screw or a rivet.

In Figure 15, a pair of elongate screws 153 are shown extending through such regions of two different first sub-units 150, 160 such that they assist in securing together the first sub-units.

The second formations 4 in the first sub-unit 150 are dissimilar to the second formations in the first sub-unit 2, and within the first sub-unit 150 there are two second formations 4 of one kind and two second formations 4 of a second kind. Both the second formations of the one kind and of the second kind are generally T-shaped in analogy to the second formations 4 of the first sub-units 2 but the second formations 4 of one kind each afford an aperture 153 which extends longitudinally of the first sub-unit 150 throughout the entire length thereof, within the aperture 153, is secured a thermal breaking member 154.

The second formations 4 of one kind are arranged within the first sub-unit 150 such that they are presented on oppositely facing sides of the first sub-unit 150 so that a thermal break occurs transversely across the first sub-unit 150 in one direction only. The second formations 4 of the second kind afford no thermal breaking members.

At corners of a construction which comprises first sub-units according to the invention, it is desirable to provide thermal breaking members within the first sub-units across sides thereof which extend perpendicular to one another. However, there is a difficulty in extruding first sub-units in which provision for such an arrangement of thermal breaking members can be made. For this reason a third embodiment of a first sub-unit may be provided. Such a third embodiment of the first sub-unit is marked in Figure 15 with the numeral 160.

The first sub-unit 160 provides thermal breaking members 161 extending across sides of the first sub-unit 160 which are mutually perpendicular. Thus in the part of the construction which is shown in Figure 15 a thermal break is provided across a gable end wall of the construction and across the perimeter of a roof of the construction.

In order to conveniently obtain this arrangement of thermal breaking members, the first sub-unit 160 is formed in two parts 162, 163 each of which

comprises a channel section member which is, essentially, half of a sub-unit 160.

The two channel members 162, 163 may be secured together by means of suitable retaining means such as screws, bolts or rivets which extend through adjacent parts of the thickened regions 151 which are formed by juxtaposed parts when the channel members 162, 163 are brought together.

The channel member 163 affords male formations 164 which extend longitudinally of the channel member 163 at each longitudinally extending rim of the channel and the channel member 162 affords female formations 165 which extend longitudinally of each longitudinally extending rim of the channel member 162 such that when the channel members 162, 163 are juxtaposed, the male formations 164 interfit with the female formations 165 to provide a thickened region 151 through which the retaining means may be inserted to secure the channel members together.

Because both of the male formations 164 are provided on the channel member 163, and the female formations 165 are provided on the channel member 162, it will be appreciated that, if desired, the relative orientation of the channel members 162, 163 can be changed by moving one of them 180° relative to the other and securing them together in this way such that the thermal breaking members 161 are presented on oppositely facing sides of the resulting first sub-unit rather than on sides thereof which extend perpendicular to one another.

It will be seen that a connecting sub-unit 166 is provided between the first sub-unit 150 and the first sub-unit 160, which connecting sub-unit 166 is different from the connecting sub-unit 90 as shown in Figure 13. It will be understood that the precise construction and configuration of the sub-units which are accessory to the first sub-units 2, 150, 160 may be varied and altered without departing from the spirit or scope of the invention.

Figure 16, which is taken on the line A-A in Figure 1, in analogy to the construction shown in Figure 3, shows a first sub-unit 150 instead of a first sub-unit 2 and the manner in which it would be connected via screws 153 to a further first sub-unit 150 with respect to which it extends perpendicular.

Figure 17 illustrates how a first sub-unit 150 is utilised with a reinforcing sub-unit 170 in an analogous section to the section taken in Figure

4. In Figure 17 however, the reinforcing sub-unit 170 is dissimilar to the reinforcing sub-unit 40 which is shown in Figure 4 and comprises an octagonal member which extends within the first sub-unit 150 and is secured thereto by means of screws 175.

The first sub-unit 150 and the first sub-unit 160 can be used in any of the circumstances described in accordance with Figures 1 to 14.

The features disclosed in the foregoing description, or the following claims, or the accompanying drawings, expressed in their specific forms or in the terms or means for performing the desired function, or a method or process for attaining the disclosed result, may, separately or in any combination of such features, be utilised for realising the invention in diverse forms thereof.

CLAIMS;

1. A first sub-unit for a construction, which construction comprises a plurality of sub-units attached together, the sub-unit comprising an elongate member which affords a plurality of first formations on a longitudinally extending surface thereof, the first formations being adapted to interfit with one or more further formations provided on one or more of the other sub-units, wherein the first formations are distributed symmetrically or substantially symmetrically about a longitudinal axis of the first sub-unit.
2. A first sub-unit according to Claim 1 wherein there are four first formations each projecting away from the others and from the longitudinal axis of the first sub-unit in two and mutually perpendicular planes which bisect one another at the longitudinal axis.
3. A first sub-unit according to Claim 1 or Claim 2 which affords a plurality of second formations on its longitudinally extending surface, the second formations being dissimilar to the first formations and being adapted to interfit with one or more still further formations which are provided on one or more of said one or more of the other sub-units.
4. A first sub-unit according to Claim 3 in which the second formations are distributed symmetrically or substantially symmetrically about a longitudinal axis of the first sub-unit.
5. A first sub-unit according to Claim 4 wherein there are four second formations each of which extends away from one of the other second formations at 180° thereto and which extends away from a plane containing the longitudinal axes of the remaining two second formations at 90° thereto.
6. A first sub-unit according to Claim 5 in which both the first and second formations are distributed symmetrically about a plane which comprises a plane of symmetry of any one of the first formations or any one of the second formations.

7. A first sub-unit according to any one of Claims 3 to 6 in which the first and second formations both afford parts which extend towards each other.
8. A first sub-unit according to Claim 7 in which the parts, in transverse section, each define a portion of the periphery of a square.
9. A first sub-unit according to Claim 7 or Claim 8 in which the parts are the extremities of the formations.
10. A first sub-unit according to any one of Claims 3 to 9 in which each first formation is arrow shaped in transverse cross-section, half of a head of the arrow extending towards one of the second formations and the other half of the head extending towards a further second formation.
11. A first sub-unit according to any one of Claims 3 to 10 wherein each second formation is generally T-shaped in transverse section, a top of the T extending towards and substantially parallel with half of a head of a first formation on one side thereof and towards half of a head of another first formation on the other side thereof.
12. A first sub-unit according to any one of Claims 3 to 11 in which, between each pair of first formations, a second formation extends.
13. A first sub-unit according to any one of Claims 3 to 12 wherein both the first and second formations extend throughout the entire length of the first sub-unit.
14. A first sub-unit according to any one of the preceding claims which is tubular.
15. A first sub-unit according to Claim 14 in which the tube is of a regular transverse cross-sectional shape.

16. A first sub-unit according to Claim 13 or Claim 14 in which the tube is octagonal in transverse cross-section, the first formations being provided on every second face thereof and the second formations being provided on every alternate face thereof, each face bearing a first formation only or a second formation only.

17. A first sub-unit according to any one of the preceding claims which comprises an extruded material.

18. A first sub-unit according to any one of Claims 1 to 16 which includes thermal breaking members extending longitudinally thereof.

19. A first sub-unit according to Claim 18 in which the thermal breaking members are located within and form part of two of the second formations.

20. A first sub-unit according to any one of the preceding claims which comprises two channel members secured together with the channels of each channel member facing towards each other and defining an internal hollow of the first sub-unit.

21. A first sub-unit according to Claim 20 in which one of the channel members affords a male formation and the other channel member affords a female formation with which the male formation may be interfitted.

22. A first sub-unit according to Claim 21 in which the male formation extends longitudinally of its respective channel member at or near a longitudinally extending rim of the channel and another male formation is provided at or near another longitudinally extending rim of the channel and extends longitudinally thereof, and the female formation extends longitudinally of its respective channel member at or near a longitudinally extending rim of the channel and another female formation is provided at or near another longitudinally extending rim of the channel and extends longitudinally thereof.

23. A first sub-unit according to Claim 21 or Claim 22 in which the two channel members are adapted to be secured together such that the thermal breaking members included in each of them are provided in oppositely facing sides of the first sub-unit when the two channel members are secured together or such that the thermal breaking members included in each of channel member lie in sides of the first sub-unit which extend substantially perpendicular to one another.

24. A first sub-unit according to any one of the preceding claims which includes parts which are adapted to receive fixing elements such as screws therethrough.

25. A first sub-unit according to Claim 24 in which the parts comprise at least one of a longitudinally extending hole or a longitudinally extending recess.

26. A first sub-unit according to any one of Claims 20 to 22 in which each channel member affords at least one thermal breaking member.

27. A first sub-unit substantially as hereinbefore described with reference to and as shown in the accompanying drawings.

28. A kit of sub-units suitable for attachment together to form a construction, the sub-units including a first sub-unit according to any one of Claims 1 to 27.

29. A kit of sub-units according to Claim 28 in which each sub-unit includes a part by which it may be interfitted with another sub-unit to permit of attaching the sub-units together.

30. A kit of sub-units according to Claim 29 in which the attachment between the sub-units is releasable by moving the sub-units in specific directions relative to one another.

31. A kit of sub-units according to Claim 29 or Claim 30 wherein, on some of the sub-units, the parts comprise formations which are adapted to fit with other parts.

32. A kit of sub-units according to Claim 31 in which the formations on at least some of the sub-units are resiliently deformable.

33. A kit of sub-units according to any one of the preceding claims in which the sub-units include a glazing panel, beading, guttering, a sill and a door.

34. A kit of sub-units substantially as hereinbefore described with reference to and as shown in the accompanying drawings.

35. Any novel feature or novel combination of features described herein and/or shown in the accompanying drawings.